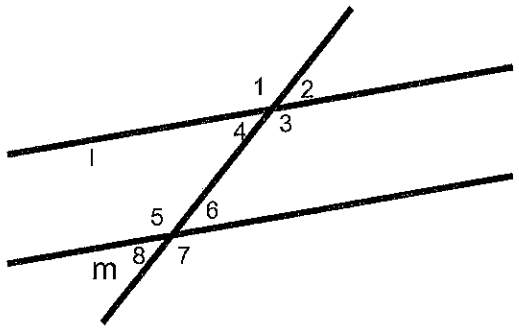
Name_____ Date_____

201 Parallel Line Proofs—worksheet 2

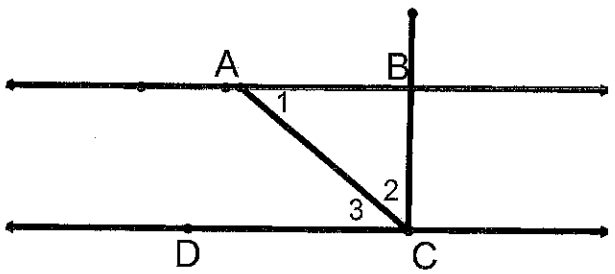
1. Given: l || m
Prove: ∠3 and ∠8 are supplementary



Statements	Reasons

2. Given: ∠1 ≅ ∠2
$\overrightarrow{CA}$ bisects ∠DCB

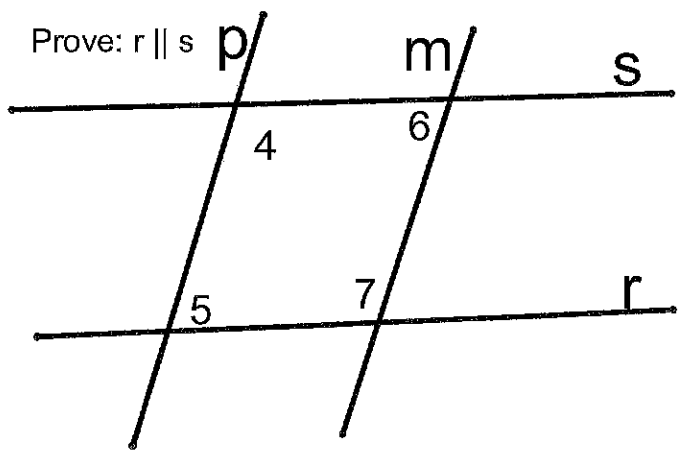
Prove: $\overline{AB} \parallel \overline{DC}$



Statements	Reasons

3. Given: p || m; ∠4 ≅ ∠7

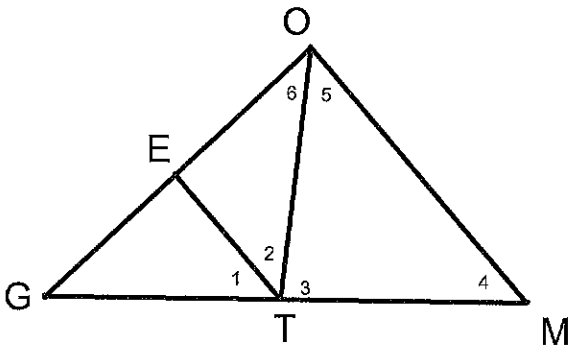
Prove: r || s



Statements	Reasons

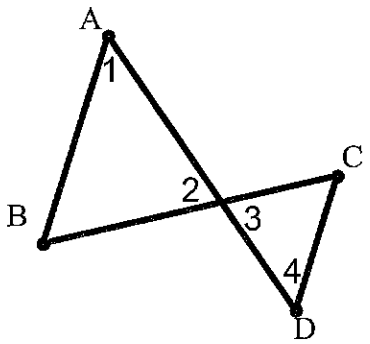
4. Given: $\overline{ET} \parallel \overline{MO}$; $m\angle 4 = m\angle 5$

Prove: $\overline{TE}$ bisects $\angle GTO$



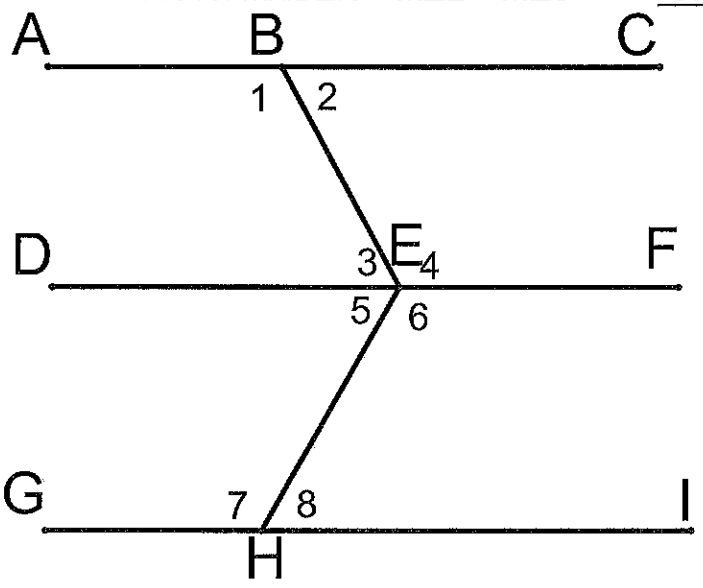
Statements	Reasons

5. Given: $\angle 1$ and $\angle 2$ are complementary
$\angle 3$ and $\angle 4$ are complementary
Prove: $\overline{AB} \parallel \overline{CD}$



Statements	Reasons

6. Given: $\overline{AC} \parallel \overline{DF}$; $\overline{DF} \parallel \overline{GI}$
Prove: $m\angle BEH = m\angle 2 + m\angle 8$



Statements	Reasons

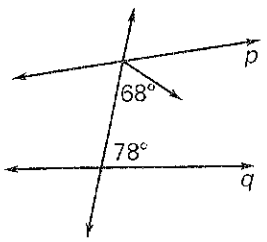
Name _____ Date _____

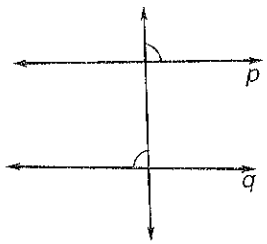
LESSON 3.3

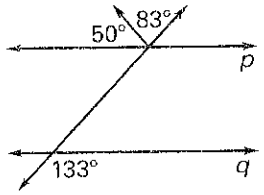
Practice C

For use with pages 161–169

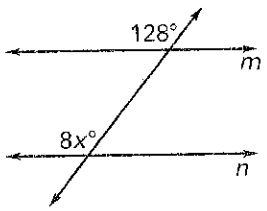
Is there enough information to prove that lines p and q are parallel? If so, state the postulate or theorem you would use.

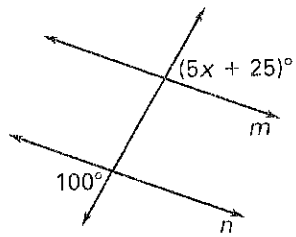
1. 

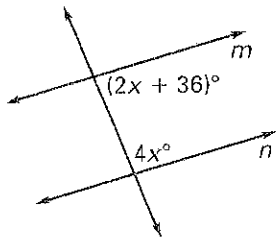
2. 

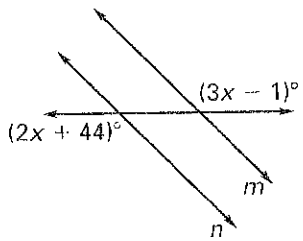
3. 

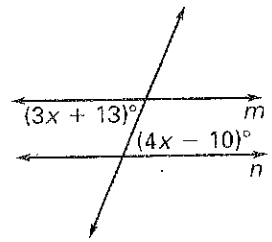
Find the value of x that makes $m \parallel n$.

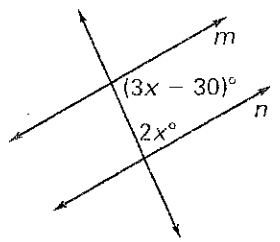
4. 

5. 

6. 

7. 

8. 

9. 

In Exercises 10–14, use the diagram and the given information to determine if $m \parallel n$, $p \parallel q$, or *neither*.

10. $\angle 3 \cong \angle 10$
11. $\angle 1 \cong \angle 13$
12. $\angle 4 \cong \angle 11$
13. $\angle 12 \cong \angle 13$
14. $\angle 3 \cong \angle 14$